

AMENDMENTS TO THE SPECIFICATION

Page 4, please amend the paragraphs starting on line 11 and 18, respectively, as follows:

--As far as presently known, the only device that has two (or more) heads and reads both sides of a disc while the disc is rotated in a single direction is a magnetic hard drive. However, the disc for a magnetic hard drive has only one layer of information on each side. Moreover, the data on the disc is arranged in concentric circles rather ~~then~~ than spiral tracks, and therefore, the drive needs a reading mechanism that is much simpler and far less accurate than the reading mechanisms used in an optical disc player.

In the present invention, the data on each side of a double-sided disc is laid out along a respective spiral such that the spirals on the two sides of the disc are mirror images of each other when viewed from the respective sides. In other words, one side has data arranged along a right-handed spiral and the other side has data arranged along a left [[]] handed spiral.--

Page 11, please amend the paragraph starting on line 21 as follows:

--Spin sensor or disc rotation detector 138 selectively receives signals from the laser head 122 and/or laser head ~~420~~ 121 and uses these signals to determine the direction in which data on the respective side of disc 50 (or a portion thereof) is written. Several embodiments for performing this function are disclosed below in conjunction with Figs. 5-5D and 6.--

Page 12, please amend the paragraph starting on line 3 as follows:

--The player 120 may also be provided with a display 134 that provides information and/or instructions to the customer. In addition, the player 120 may be provided with some manual controls, such as switch 136 that may be used to operate the player 120 either in a normal or a reverse mode, a disc selection switch ~~140~~ 139 that may be used to select the type of disc to be played, and so on. Of course, the player 120 also may have other types of control and manual switches for performing various conventional operations such as STOP, EJECT, FAST FORWARD, FAST REVERSE, and so on. These switches have been omitted for the sake of clarity. --

Page 13, please amend paragraph starting on line 19 as follows:

--As discussed above, in one mode, if the lead-in area is not found then ~~in~~ an error message is displayed (Step 208), or a message is displayed asking the user to turn the disc upside down and reinsert it (Step 210).--

Page 17, please amend paragraph starting on line 1 as follows:

--Fig. 2C shows an optical disc drive 310 that may also be used in a standard PC, but is particularly suited for portable devices, such as laptops, PC tablets, etc., where space and weight must be minimized. This device 310 has a case 312 with an opening 314 accepting a tray 316. The tray 316 is provided with the first internal laser head 122 positioned to read the bottom side of the optical disc 50. A second head 121 is mounted within the case 312 and is oriented toward the optical disc 50 as well. Again, auxiliary means for moving the tray and the heads, and the motor rotating the disc 50 have all been omitted

from the drawing. The case 312 is an integral element that is also used to hold a keyboard, various input and output ports, and pointing devices. The case may also incorporate a hinged display. These standard elements have also been omitted from the drawing. --

Page 18, please amend paragraph starting on line 1 as follows::

Fig. 3 shows an alternate embodiment of the invention for reading disc 50, the embodiment consisting of a player 100 with a single laser head or read head 102. In this embodiment, the disc 50 is rotated in the clockwise direction R by a motor 103. The operation of the player 100 is controlled by a microprocessor or controller 104. The microprocessor 104 sends control signals to a laser head controller 106, a motor controller 108 and a yoke 110 which may include its own controller (not shown). The laser head controller 106 is used to control the position of the laser head 102 radially along the surface of the disc 50 with a linear motor (not shown). The data read by the laser head 102 are fed to a buffer 112. From the buffer 112 the data are handled by a further processor (not shown) for conversion to a multimedia program, an audio program, etc. The motor controller 108 operates the motor 103 which spins the disc 50 in a conventional manner. A spin sensor 138 is also provided which selectively detects signals sensed by the laser head ~~122 (and/or 124)~~ 102.